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THOMAS G. NEWMAN,
EDITOR.

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Editorial Buzzings.

I Could smile at the grave
Of my friends; couldn't you,
If you knew that from heaven
They smiled back at you?

We are sorry to learn that Mr. Geo. E. Hilton, of Fremont, Mich., is still suffering from the effects of *la grippe*. He is threatened with paralysis, and is very weak. This intelligence came from his brother, who called at our office last week. His many friends will be pained to read this notice.

A Hint to the many friends of the Rev. L. L. Langstroth will be timely. The amount subscribed for his annuity has again become due, and we hope that each one will now send him the usual "free-will offering." Let every lover of that "grand old man" act promptly, and help to pay our debt of gratitude.

Removal.—Circumstances have made it to our advantage to remove to more commodious quarters, and we may hereafter be found at 199, 201 and 203 East Randolph Street—two blocks north and one block east of our former location. This move doubles our floor space—of which we now have over 10,000 square feet. Our former location was in the fifth floor of a building, but we now occupy the *third* floor of a building near the corner of Fifth Avenue and Randolph Street. Our friends are always welcome.

Some One at Darrtown, O., wrote us to send a copy of the Constitution of the National Bee-Keepers' Union, but forgot to sign any name. Who is it? We cannot send anything until we know to whom to address it.

Aphides and Honey-Dew.—The aphides, this year, have been more plentiful than for the past many years. All the trees have been loaded with honey-dew. To keep it out of the clover honey has been almost a superhuman undertaking. Many a crop of honey has been entirely ruined by it. Let none of it be put upon the market—under any circumstances. That would be disastrous.

"La Grippe" is Still Here.—There were 424 deaths in Chicago during the week ending Saturday, July 4, an increase of 31 over the corresponding week of last year.

Callers were numerous last week. Mr. John T. Calvert, Business Manager of *Gleanings*, gave us a call on his way to Minneapolis to attend the meeting of Christian Endeavor. The next day Mr. F. H. Macpherson, Associate Editor of the *Canadian Bee Journal*, gave us a friendly call. He is traveling on the lakes for the benefit of his health. He is slowly recovering from the accident of last Winter. Success to both.

Colony or Swarm—Which?

Mr. E. L. Holden, of North Clarendon, Vt., writes thus about the use of these words to indicate bees settled down to work in a hive:

I have had something to do with bees from early boyhood, and always heard bees in hives called swarms, as well as when coming out or swarming.

As I am somewhat advanced in years (born May 5, 1814), and continue to call hives of bees swarms, I may be, perhaps, called an "old fogey."

As I never heard a good reason for changing the name, I still call them swarms, notwithstanding the majority of bee-keepers call them colonies.

In support of my practice, I refer to Webster, the acknowledged standard for definitions. He defines the word "swarm" thus: 1. A large number of small animals or insects, especially when in motion. A deadly swarm of hornets. 2. Especially a great number of honey-bees which emigrate from a hive at once, and seek new lodgings under the direction of a queen; or a like body of bees united and settled permanently in a hive.

The gist of the argument of our aged friend is that Webster's Dictionary states that a *swarm* is "a great number of honey-bees which emigrate from a hive at once, and seek new lodgings under the direction of a queen; a like body of bees united and settled permanently in a hive."

If the statement of the Dictionary, as quoted in the last line, must settle the matter, how about the sentence just preceding it, viz.: that the bees "seek new lodgings *under the direction* of a queen!" Does that statement *settle that matter, too*? Every well-informed bee-keeper will dispute that assertion in the Dictionary!

The queen is *not* a ruler in any sense of the word. She is the mother—the egg-layer—and is governed and controlled at every step by the bees! She is always under the direction of "the worker bees!" She does not *lead* the swarm, but is generally the last to leave the hive, and quite often has to be

sought out and driven from the hive by the bees!!

If the statement in one part of the sentence is so erroneous, *why* should the latter part of the same sentence be infallible? Even Mr. Holden will condemn the former, while he desires to defend the latter!

But our venerable correspondent continues his argument thus:

Now let us see how Webster defines the word "colony." It is:

1. A company of people transplanted from their mother country to a remote province or country, and remaining subject to the jurisdiction of the parent State, so long as they remain in dependence on the mother country; as "the British colonies in America."

2. The country planted or colonized—a settlement.

Now, in view of these definitions, I feel justified in using the word *swarm* to describe a mass of bees anywhere. What objection can be made to its use? It is shorter and easier to write or speak than colony.

E. L. HOLDEN.

We are well aware that the word "colony" is used in other senses, but its fourth definition, as given in Webster's Dictionary, is the only one applicable to bees, and that Mr. Holden did not quote. It is this: "A number of animals or plants living or growing together." Bees are animals [class, insecta]; and a number of bees living together may very properly be called a colony.

The use of the word "swarm" for colony cannot be justified by any rule of the language! A "swarm" issues from a hive for the purpose of increasing the families or colonies, but when it settles down to the business of house-keeping it is a colony, and not a swarm!

Because it was erroneously called a "swarm" in "ye olden time," no more proved its *correctness* or propriety, than when the only perfect female in the hive was called a *king*!!

Formerly many erroneous terms were used, but with our advancing intelligence and scientific research, it would be unpardonable to return to the darkness and ignorance of the past, for our

theories of government or definition of words.

The ancients believed that the earth was a plateau floating in water, and that the sun revolved perpendicularly around it; it would be just as reasonable for us to return to that exploded theory as to return to the inappropriate use of the words or phraseology of those benighted ages.

No; no! At the very dawn of the twentieth century, under the benign rays of the refulgent glory of the sun of this ever-advancing and progressive era, let us look *forward* (not backward) for our ideas, our inspiration, and our language!

For currents of life run ever away

To the bosom of God's great ocean.

Don't set your force 'gainst the river's course,

And think to alter its motion.

Don't waste a curse on the universe—

Remember, it lived before you.

Don't butt at the storm with your puny form—

But bend and let it go o'er you.

Bugs.—Eberhart's Elements of Entomology is a new book of 144 pages. It has 40 full-page plates, embracing more than 300 figures. It contains full and complete directions for collecting, mounting and preserving insects; a pictorial key to all our common insects, and a full explanation of technical terms.

In describing the collecting and mounting of insects—nothing essential is omitted. Useful instructions are given on time and places to hunt, etc.

There is no amusement productive of as much benefit to one's health as the capturing of thousands of insects, impaling and preserving them. This book tells you how to do it. It can be obtained for 35 cents of A. Flanagan, publisher, 185 Wabash Ave., Chicago, Illinois.

Farm Law.—A very useful book for the farmer is on our desk. It is entitled: "The Law Concerning Farms,

Farmers, and Farm Laborers, Together with the Game Laws of all the States, by Henry Austin, of the Boston bar." Price, \$2.00. It has 250 pages, and is a "boiled down" statement of the common and statute farm laws, the knowledge of which would save a large amount of litigation. It is written in the simplest language, so as to interest every reader. We commend it to those who want enough knowledge of law to keep them out of lawsuits. It can be obtained at this office.

Beautiful Yellow Bees.—A cage, containing an untested queen and a dozen bees, are on our desk. They are from the apiary of John E. Michael, of German, O., and are beautifully marked with five bands well developed, and are as handsome as the most fastidious bee-fancier could wish for. Mr. Michael writes thus about them:

The bees are the progeny of an untested queen, which I mailed to Dixon, Ills., a month ago. The untested queen, which I send you, has just commenced to lay, and is the daughter of the mother of the five-banded Italian queen which Mr. A. I. Root mentioned in *Gleanings*. I shall send out many next month just as handsome as this queen.

United Efforts accomplish all the great achievements in this world. Alone, it is exceedingly difficult to do that which can quite easily be done by united persistent efforts. The following letter from friend Hambaugh illustrates this matter very forcibly:

FRIEND NEWMAN:—Please accept my sincere thanks for your assuring words of appreciation of our efforts at Springfield; and should the work we have accomplished redound to the good of apiculture, the fruition of my hopes will be realized. I will say, however, that our efforts would have been futile had we not the assistance of such staunch friends as yourself, and a host of others from the outside. Yours sincerely,

J. M. HAMBAUGH.

Spring, Ills., July 6, 1891.

Another Victory.—The second case against G. W. Cole, mentioned last week on page 41, has been decided in his favor by Justice Bass. The National Bee-Keepers' Union is managing the case, and this is another victory for the Union. The following items from the local papers will give the details in their own language:

After devoting nearly all of Tuesday to hearing the testimony of neighbors and bee-keeping experts, and the arguments of the Hon. M. Walker for the prosecution, and 'Squire Stearns and B. M. Chipperfield for the defense, Justice Bass decided that G. W. Cole had not, since May 12 (the date of the former similar complaint against him), been guilty of keeping bees upon his premises in violation of the law in relation to nuisances.

It was proven that since the date mentioned, one person had been stung by a bee, which might have come from one of the 37 colonies kept by the defendant.

It was shown also that some persons had been terrified and annoyed, although not stung, by bees. It was in evidence that bees, presumably belonging to the defendant (or some other or others of the four bee-keepers in that immediate vicinity) got into a watering trough and sometimes stung the noses of horses drinking the water in which the insects, washed from the sides of the trough, were drowning. One witness testified to the bees soiling clothes hung out to dry, so that some pieces had to be washed over.

Offsetting this, seven bee-keepers testified to the pacific disposition of the honey-gathering insect, and that only during a very few days in early Spring was the presence of a colony of bees near drying linen objectionable.—*Canton Register*.

Mr. Cole had previously been defendant in a similar suit, in which his neighbors, represented by Mr. Shaffer, said that the quarter of a hundred hives of bees belonging to Mr. Cole, were a nuisance, especially during the "emptying" period in the Spring.

The case went against Mr. Cole, who took an appeal. While the case was in this shape, Mr. Shaffer brought another suit on the same ground as before, and the defense proved, by experts, that the case was not similar, the later time in the season producing change of circum-

stance, as the "emptying" only takes place after the bees have been shut up for a long time.

It was proved by witnesses that the nuisance alluded to continued during the Summer months to the detriment and defacement of various and sundry articles of clothing, that had been washed and hung out to dry.

The experts testified that such things were impossible and contrary to precedents established by all well regulated bees. Bees were innoxious, but disliked having their hair stroked the wrong way, and were liable to produce facial contortion in whoever pinched or stuck pins into them.—*Peoria Journal*.

That terrible bee case was decided in accordance with the forecast given in the *Journal* yesterday. Mr. Cole came out ahead this time. Now, for a little common-sense forbearance. It is no use trying to force Mr. Cole to move the bees until cold weather sets in; for if removed now, the bees will straggle back by thousands, and their voice will be for war. If the matter is allowed to rest until Winter, there are grounds for believing that the tenants (Italian and native born) will be moved to a less crowded locality.—*Peoria Journal*.

Now, that both sides have won a round, the thing is pretty badly mixed. Mr. Cole has 37 colonies of bees, and, according to the best of our recollection, there are fully one million bees in a nest, and every one has a stinger with a mighty sharp point. And, counting the points made for and against the bees in the various discussions on the streets, there must be a point in the case for every bee, and the fact that there are thus in the neighborhood of 75,000,000 points involved, is what causes the lawyers to smile, and it is what will make the judge and jurors swear, when Mr. Cole's appealed case comes up in the Circuit Court next month.—*Fulton Republican*.

Next month the appeal comes up before the Circuit Court, and we have no doubt but that it will be another victory for the Union. Concentrated venom is the cause of the persecution.

Father Langstroth, although occasionally experiencing a little lifting of "the dark cloud," yet he has had no material relief for nearly two-and-a-half years.

Queries and Replies.

Comb-Honey and Separators.

QUERY 775.—1. Does the use of separators influence the amount of honey stored in one-pound sections? 2. If so, to what extent? 3. Which way would the crop have the greatest market value, with or without separators? 4. Which are the best, wood or tin separators?—Iowa.

1. Not that I could ever see. 3. With separators. 4. I use tin.—G. M. DOOLITTLE.

1. None of material consequence. 3. With separators. 4. Wood.—J. M. HAMBAUGH.

1. I think not. 3. I find no difference. 4. I find them equally effective.—R. L. TAYLOR.

1. Not a bit. 3. With separators, every time. 4. Wood—made of poplar.—C. H. DIBBERN.

Having never used separators, I cannot answer these questions. I do not like to guess at things.—M. MAHIN.

1. No. 3. With separators. 4. Tin for wide frames, and wood for all other styles of surplus cases.—JAMES HEDDON.

1. I think not. 3. With separators, is my experience. 4. Whichever costs the least in proportion to the time that they will last.—A. J. COOK.

1. Not much, if any. 3. With separators for distant markets. Possibly some home markets are better without. 4. Wood for loose, tin for fixed.—C. C. MILLER.

1. I think not, as I have tried it with and without. 3. With me the use of separators would increase the value of a great deal of it from 1 to 2 cents per pound. 4. Wood.—H. D. CUTTING.

1. I am of the opinion that it does, to some extent; but to what degree I am unable to say. 3. Ordinarily with separators, as the honey comb comes out in nicer shape. 4. I prefer the tin.—J. E. POND.

1. I never used separators. 2. I do not know. 3. It depends upon the market; if I shipped my honey I should use separators. 4. Having used neither, I am not prepared to say.—MRS. L. HARRISON.

1. Possibly it may, but I think not much. I interpret this question to mean the aggregate amount stored by the colony. 3. That produced with separators as a rule. 4. Either will do. Theoretically, wood is preferable.—EUGENE SECOR.

1. As I use crates, and fill sections two-thirds with foundation well fixed, I have never had the need of separators to secure straight combs. If you cannot get your bees to make straight combs by proper management, use separators, but you will get less honey. 4. Wood is as good as tin, and less expensive.—J. P. H. BROWN.

1. I think not, with open side sections and perforated wood separators. I believe they do as usually used. 2. The difference may amount to as much as one-fourth of the crop in favor of sections without separators as usually made and used. 4. Perforated wood separators are better and more durable than tin.—G. L. TINKER.

1. According to my experience, separators may or may not influence the amount of surplus stored. Some seasons there appears to be little or no difference, while the difference is plain enough under different circumstances. 2. The extent is an uncertainty. 3. That depends on your market. It does not effect the profits, with me, either way, because I can sell the unshapely sections for as much as is realized on the perfect ones. 4. I prefer tin, because it takes up less room in the section cases, and is the most easily cleaned.—G. W. DEMAREE.

1. There is not much difference in the amount of honey stored, whether separators are used or not. 3. Comb-honey produced where separators are used is much straighter, and when crated for market the combs will not interfere with one another; there is no waste by leakage, and not being "sticky," and, therefore, undesirable, it is of greater market value. 4. Whichever is cheapest and most convenient.—THE EDITOR.

Convention Notices.

17 The Carolina Bee-Keepers' Association will meet at the Court House, in Charlotte, N. C., at 10 o'clock a.m., on Thursday, July 30, 1891.

A. L. BEACH, Sec., Pineville, N. C.

17 The Rock River Bee-Keepers' Association will meet at Sterling, Ill., on Thursday, Aug. 6, 1891.

J. M. BURTON, Sec., Morrison, Ill.

17 The ninth annual meeting of the Susquehanna County, Bee-Keepers' Association will be held on Thursday, Sept. 3, at South Montrose, Pa.

H. M. SEELEY, Sec., Harford, Pa.

Topics of Interest.

Thunder Storms and the Honey Crop.

JOSHUA BULL.

The prospect is not very encouraging for a good honey harvest in this locality, the early part of the season having been exceedingly dry. From April 11 to June 15 we had only about three-fourths of an inch of rainfall, and white clover was very much dwarfed in its growth on account of the dry weather; nevertheless it commenced to bloom early in June, and from June 10 to 15 yielded nectar very freely.

My bees, being in excellent condition, and ready for the harvest, stored surplus in the supers quite freely for a few days.

From June 16 to 18 we had a series of thunder storms, with heavy rains, during which 5 or 6 inches of rain fell, and the ground became thoroughly soaked, and we have had occasional showers since, in consequence of which vegetation has taken a new start.

White and alsike clovers are now blooming profusely, but the bees do not seem to store honey as fast since the rain came as they did a few days before.

We shall probably not get much, if any, basswood honey this year, frost having destroyed most of the buds. Unless the clovers continue to yield honey beyond their usual season, and more freely than they have done for the past two weeks, the white honey harvest will be very light in this vicinity.

If there is an abundant crop in some places, as has been intimated by reports in some of the papers, I hope that those who are thus favored will not be in a hurry to sell their honey at reduced prices, thinking that there is going to be an overplus on the market.

Whatever there may be above an average crop in some localities, may all be needed to make up the shortage in other parts; so that, on the whole, there will be only an average supply for the general market.

I hope that all bee-keepers who take any interest in the matter, will make careful observations this season, as to the effect of thunder storms upon the flow of nectar in the flowers; and report the result of such observations in the BEE JOURNAL.

There is, of course, a vast difference in the force of such storms, and it is but reasonable to expect that the effect (if

any) would be in proportion to the violence of the storm. A passing cloud, with a little rain, and a few claps of thunder, can hardly be called a thunder storm, but only a "thunder shower," and may not produce any discernable effect upon the flow of nectar.

In this State we sometimes have thunder storms that continue for hours together, and it is not unusual to see one continuous blaze of lightning for several seconds, as though the very clouds were on fire. Occasionally a streak of chain lightning will come so near that it will thrill every nerve in one's body like a shock from an electric battery, and cause even the ends of your fingers to tingle; while successive peals of thunder make the very earth tremble beneath your feet.

Such a storm presents a scene of sublime grandeur beyond description to every lover of nature who has nerve enough to behold, with steadfast gaze, the wonderful display of the elements.

Whenever such a storm passes over this locality, I feel quite safe in predicting that the bees will not store very much surplus honey the next six days at least, and I should like to know if similar storms do not produce similar effects in other localities. Who will make careful observations and report?

Seymour, Wis., July 6, 1891.

Bees and Honey—An Allegory.

It is really a lovely garden. Never were there whiter lilies, nor bluer violets, nor more interesting pansies.

But it needs something. I think it is bees.

For bees are so picturesque! And then the hives—the hives are as picturesque as the bees themselves. Apple trees without bee-hives under them are as forlorn as lilies without bees over them.

So we bought some beautiful hives, and placed them in the orchard, just on the edge of the garden. Soon they began to be filled with delicious honey in dear little white cells; but the bees were nowhere to be seen. Every morning they disappeared, flying far out of sight, and the lilies and roses were as forlorn as ever. We had the credit of having bees, for every one could see the hives and taste the honey; but we did not have the bees.

So one morning I went out and talked to them about it.

"Dear bees," I said, "what is it that you miss in the garden? Every morn-

ing you fly away; but where can you find whiter lilies, or bluer violets, or more interesting pansies?"

"We are not looking for whiteness, or blueness, or interestingness," the bees explained. "We are looking for honey; and the honey is better in the clover field that is only a mile away."

"Oh! if that is all," I exclaimed gladly, "pray do not have the honey on your minds—"

"We do not," they said. "We carry it in little bags."

"I mean, do not mind about the honey—"

"Certainly not; how could we, when we haven't any minds?"

"But please do not feel obliged to hunt for honey. I do not care at all for honey; that is," I added hastily, as a slight buzzing made me fear that perhaps I had hurt their feelings, "I like you, you know, for yourselves alone, not for what you can give me. The honey is delicious, but we can buy it very nice at the grocer's. If you like honey for yourselves, I will buy some and fill the hives for you, so that you need not work at all, if you will only stay in the garden, and hover over the lilies, and—and—be picturesque."

They promised to try. And they did try. Whenever I looked from my library windows I could see them practicing their hovering, and they really hovered extremely well. Satisfied that my garden was at last complete, I gave up watching it, and devoted myself to literary work. Every morning I seated myself at the desk and wrote rapidly until noon. But one day I was interrupted by a bee.

He had flown in at the window. Perching himself on the lid of the ink-stand, he waited awhile; then at last asked quietly:

"Why are you not out-of-doors this beautiful morning? The garden is lovely; I cannot see—" and he glanced critically at the vases about the room—"I cannot see that these lilies are any whiter, or the violets any bluer, or the pansies any more interesting than those out there. And we miss you. A garden really ought to have people walking in it. That is what gardens are for. I do not see why we must be out there to be seen when there is nobody to see us."

"But, dear bee, I am not looking for flowers this morning; I am writing."

"And what are you writing?"

"A sonnet."

"Are there no sonnets to be had at the stores?"

"Oh, yes! Shakespeare's and Milton's and Wordsworth's, of course."

"And are your sonnets better than Shakespeare's?"

"Why, of course not."

"Then let your sonnet go. Come out in the garden with us, and on the way home I'll buy you a sonnet at the store; a Shakespeare sonnet—the very best in the market."

"But, you see, I want to try making a sonnet of my own."

"Very well, let me see you try."

I took up the pen again, and was soon absorbed in my rhymes and rhythm. Indeed, I had quite forgotten that the bee was there, till he stirred uneasily, and finally sighed.

"Are you not happy in the garden?" I asked.

"Not very."

"But why not? Haven't you all the liberty you want?"

"No; we have every liberty except the liberty we want."

"And that is—"

"The liberty to work. We find that it is not lilies; it is not clover; it is not honey; it is gathering the honey that we like. It is not even gathering the honey for you that we care so much about; because, you see, you do not like honey; it is just gathering it."

"I do not understand. I cannot see how anybody can really like to work."

"But we do. Suppose you finish your sonnet, while I try to think over a few arguments to present to you later."

So again I took up the pen, and again I was soon happily absorbed, and had entirely forgotten the poor bee, till I heard him say wearily:

"It does not seem to be very easy to write a sonnet?"

"No," I exclaimed enthusiastically, "it is not at all easy. That is the charm of it. Anybody can write some kind of verse, but very few people can write sonnets. There are a great many rules for making a sonnet; you can only have just so many lines, and just so few rhymes, and the sentiment must change in just such a place, and very few people have the patience for it. Even Shakespeare did not keep to the severest style of sonnet."

"And are you trying to obey all the rules?"

"Yes."

"Why?"

"Why, for the fun of it. It is so interesting to see whether anyone can do it."

"But it must be awfully tedious; and from your own account you are really

working harder over it than you need to."

"Only because it is a great deal more interesting to do a thing well than just to do it. Let me read you something from Wordsworth's sonnet about the sonnet. He says:

In truth the prison unto which we doom
Ourselves no prison is;

meaning that if we are willing to take pains there is a great deal of enjoyment in working hard over a thing if it is a very small thing. He gives a great many comparisons about nuns being contented with their narrow convents, and hermits in their cells, and students in their libraries, and weavers at the loom; and here, oh here is an allusion to you, dear bee: he tells how—

—Bees that soar for bloom,
High as the highest peak of Furness-fells,
Will murmur by the hour in foxglove bells.

"That is just what you meant, is it not?—that you are one of those he speaks of who have felt the weight of too much liberty?"

"Yes, that is what I meant; but I think I said it better than he says it. If it is a fine thing to say what you mean in just fourteen lines, why is it not a finer thing to say what you mean in fourteen words? And really it seems to me that I put the whole of his sonnet into saying that it is not for the honey that I care, nor for the sonnet that you care; but the fun of the work."

"The fun of the work! That is a new idea—but I believe you are right."

Of course I am right. Sweetness is all very well, but I should think it would be very tiresome just to be sweet, like a flower; I had rather be a bee and have to hunt for the sweetness."

"And I had rather be a human being and have to make things sweet. For, after all, if a bee does not find sweetness, he cannot have any, while people can make it for themselves. Do you know, by the way, that you have given me a splendid subject for a poem?"

"Perhaps I have. But if you will excuse me, I will be off to the clover field, and my advice to you is, if you must write a poem, try to put it in four lines, instead of fourteen."

So I tried, and this is the poem:

Sweetness in being sweet, that's for the
flowers;
Sweetness in finding sweets, that's for the
bee;
Sweetness in making sweet sorrowful hours;
That is the sweetness for you and me.

—St. Nicholas.

Germ Theory of Foul-Brood.

C. J. ROBINSON.

On page 538 Mr. S. Cornell states his factious objections to all that I have written since 1882 on the subject of foul-brood.

Mr. Cornell starts in with the erroneous assertion that I "lucidly admitted that there is no such thing as spontaneous generation; that there are no latent spores in living, healthy tissues."

This quotation is about the gist of what I have been claiming, and that, too, in the face of general opposition. I claim to have discovered (Mr. C. alludes to it as my "pretended discovery") that foul-brood *originates* by spontaneous fermentation of dead brood—that spores (seeds of ferment) are present in all living tissues and all fermentable matter, and that, under certain conditions, vegetation of the seeds or spores occurs.

Foul-brood in bees, and small-pox and measles are strictly fermentative diseases. Any assertion or attempt to show that I have in any wise admitted anything different from the position taken by me in the aforesaid claim is false, as a perusal of my writings will clearly show.

Mr. Cornell occupies considerable space, but he fails to touch the points that forms the issue. He dwells on what he calls my "pretended discovery," claiming that I was the first who discovered that foul-brood is a germ disease. I have not claimed any such thing, in the sense in which he puts it. All I claim to have discovered is that foul-brood originates by reason of germs being quickened in the way I set forth.

Now, let us see how the case stands! He conceded, on page 220, that "there is little doubt that Mr. Robinson had a case of genuine foul-brood propagated outside of the hive, but not as the result, as he supposes, of spontaneous fermentation."

Please note that he squarely admits my allegation, so far as it relates to the propagating of a case of foul-brood, so there is no question raised by him as to the fact that I discovered (yet he now sees fit to characterize it as a "pretended discovery") that foul-brood originated in dead brood outside of the hive. Stick a pin here, and then follow the special points in the issue between Mr. Cornell and myself.

He sets up in the issue that the larvae died in the combs left out of the hive,

and that: "When the resistance of the living tissue cells ceased, the spores of *bacillus alvei* floating in the air made a lodgment, and found in the dead larvæ a congenial medium for their growth."

Mr. Cornell himself is the father of the doctrine that "the spores of bacillus are floating in the air," and that the spores seize upon "dead larvæ" (?) If foul-brood spores do float in the air as per Cornell, all "dead larvæ" is subject to being a "lodgment" for the floating spores. This doctrine that Mr. Cornell promulgated concerning spores of foul-brood floating in the air is more ridiculous than his ominous heralding of the

periodicals to find what I had written, and he found in the *Bee-Keepers' Exchange*, for 1882, an article that I wrote on the subject of foul-brood, and he quotes a sentence, from which he assumes to tell readers of the BEE JOURNAL that they "will be surprised to learn" that I was aware of Dr. Shoenfeld's experiments previous to the announcement of my "pretended discovery." That is, I claimed to be the first who discovered that foul-brood is a germ disease, when I well knew that Shoenfeld had announced, years before, just what I aimed to palm off as my own discovery.



HOME APIARY OF C. SCHLIESMAYER, PASADENA, CALIF.

idea that foul-brood may occur by contagion on comb-foundation.

Mr. Cornell says: "Mr. Robinson might better have conceded this point (that foul-brood seriously effects mature bees) with the others." I am not so impudent as to advise Mr. C. what he "better" do or not do, but I suggest that he has something to write about in the support and defense of his doctrine—all his own—that foul-brood germs that were "floating in the air" found a lodgment in the dead larvæ in the combs of brood I exposed.

Mr. Cornell makes an attempt to impress readers with the belief that I am guilty of fraudulent "inconsistencies." He examined the files of the bee-

What are the facts in the case? Referring to the article in the *Bee-Keepers' Exchange*, I stated there that "if the fermentation has been favorable for the development of the virus, that will reproduce the putrid fermentation, then the so-called foul-brood is present, originating spontaneously by reason of the peculiar fermentative process—that every iota of the putrid matter will, like a 'little leaven, leaven the whole'—that Shoenfeld, of Germany, was the first who demonstrated by experiment—infected healthy brood with foul—and thus discovered that the poison is transmitted from hive to hive." In other words, I referred to Shoenfeld as being the first who determined by experiment that

suspected foul-brood would, or would not, as the case might be, infect healthy brood.

There is no sure way of identifying foul-brood in its early stages, from looking at the suspected brood, but a test does not fail to decide whether or not the suspect is, in reality, foul-brood.

Yes, I did know of some of Shoenfeld's writings when I referred to him. I knew he was, as I now know that he is, a theorist—not infallible, but not so fallible as to theorize—like Mr. Cornell—that foul-brood spores float in the air at all times, and that comb-foundation made of wax from foul-broody combs infects brood reared, or hatched, on such foundation.

There is no use in replying to Mr. Cornell in detail, so "I have now done with that gentleman" for the present,

Richford, N. Y.

Texas Apicultural Notes.

A. C. ATEN.

We are still having plenty of rain, and quite warm weather.

Bees have been doing well, but nothing extraordinary. The horsemint season is about over.

Crops of corn, wheat and oats are very good, and cotton looks well. Corn is in roasting ear, and a good rain last night insures a good crop, no accident intervening.

I had a good opportunity, not long since, to test the question sometimes discussed in the BEE JOURNAL, as to whether a thunder storm influences the honey-flow or not. There was an ordinary thunder storm, and a week later an electric storm of great magnitude, when there was one continuous roar of thunder, and not an instant without a lightning flash, all high in the heavens, and as grand a sight as I almost ever witnessed.

On both of these occasions the bees gathered honey as busily the day after as they did the day before. I, therefore, conclude that thunder storms do not effect the honey crop.

I witnessed something in my apiary not long since that indicated that bees have very little bee sense—at least sometimes. I knew that they would try to make queens out of drone eggs when they had no other, but did not know that they would do that when they had plenty of worker eggs. I found a hive with a laying worker. I carried the hive about two rods and shook all the

bees out on the ground, then returned the hive to its stand, thus getting rid of the laying worker. Having no queen-cell at hand, I gave them a fine frame of eggs and young brood. In a few days I examined them, and found they had not built a single cell on the frame I had given them, but to my surprise, instead, they had built some half dozen splendid cells on a frame containing drone-brood from the laying worker, which, of course, would result in nothing more than drones.

I am now trying N. D. West's coil-wire queen-cell protectors, and find them very well adapted to the purpose for which they were made.

There is some inquiry on pages 677 and 678 in regard to black, shiny bees. While old bees often lose all their hair, especially robber bees, that are crawling through all kinds of little cracks and holes, yet undoubtedly there is a disease which is sometimes called the nameless or trembling disease, all of the bees affected being hairless and shiny, as Mr. Craig expresses it.

These bees are carried out by the well ones, sometimes in large numbers. I have found salt very beneficial, throwing a small handful in the entrance, but a sure cure is to give them a young queen.

Round Rock, Tex., June 29, 1891.

Erie County, New York, Convention.

ROBERT E. MEATYARD.

The second meeting in 1891 of the Erie County Bee-Keepers' Association was held at Sardinia, June 2.

After the opening formalities were over, President L. D. O'Dell requested all apiarists present to give the number of colonies of bees of both Fall and Spring count.

The President reported 98 Fall; 52 Spring. S. S. Sleeper, 132 Fall; 111 Spring. Chas. Penton, 75 Fall; 35 Spring. Milton H. Pitcher, 77 Fall; 23 Spring. Edwin Rice, 86 Fall; 76 Spring. Aaron Karney, 15 Fall; 11 Spring. Mrs. Crosby, 42 Fall; 42 Spring. A. Graves, 13 Fall; 11 Spring. Wm. Eastman, 13 Fall; 6 Spring. Mr. Briggs, 5 Fall; 5 Spring. B. Briggs, 6 Fall; 6 Spring. V. Johnson, 11 Fall; 10 Spring. John G. Goodremote, 54 Fall; 49 Spring. H. Butler, 16 Fall; 10 Spring. Mr. Andrews, 51 Fall; 41 Spring. B. Goodin, 22 Fall; 14 Spring. R. M. Ballid, 55 Fall; 51 Spring. Robert Meatyard, 63 Fall; 23 Spring.

Chas. Penton read an essay on feeding bees, followed by some very interesting remarks by Rev. Vaught, during which he gave the association a hearty welcome.

Some very fine music was furnished by Prof. Knott and Willie Pitcher.

An invitation was extended for new members, to which several responded.

The question box was then opened, and the following questions discussed:

"How can I best increase one colony to four, using full combs and sugar for feed?"

S. S. Sleeper—Would increase by natural swarming if at all.

Luther Corey—Would increase by division, and gave his method.

"Will foul-brood exist in foundation?"

Elmer O'Dell—Think heating to the boiling point destroys the germs of the disease.

S. S. Sleeper—Heating to 212° will not kill the microbes in all stages, and it will be necessary to heat the wax several times in order to entirely destroy them.

"Is there any way of separating pollen from beeswax?"

Addison O'Dell—Place the melted wax in a warm place, so that it may cool gradually. The pollen will settle to the bottom of the cake, when it may be easily scraped off.

Luther Corey agreed with this, and would always melt with water.

"What do bees gather from tamarac and balsam trees?"

S. S. Sleeper—Propolis.

A. Graves—Propolis.

S. S. Sleeper read an essay entitled, "Bee-Keeping, a Proper and Legitimate Branch of Agriculture."

"What was the cause of our heavy losses in bees last Winter?"

Mr. Briggs—My bees starved to death.

Aaron Karney—Queenlessness and starvation.

Luther Corey—There were different causes.

Chas. Penton—Extracting from the brood-chamber.

Addison O'Dell—Lack of Fall flow of honey. Did not breed late in the season, consequently went into Winter quarters with old bees.

Milton Pitcher agreed with the last, and the general opinion was that it was on account of the lack of Fall flow of honey, as several who had such wintered their bees well.

"Is it profitable to feed artificial pollen early in the Spring? If so, what kind is best?"

S. S. Sleeper—When they cannot obtain natural pollen, it will be profit-

able. I use rye and beans, ground fine, in the proportion of two parts of rye to one of beans.

Mr. Meatyard—Have used wheat flour with good results.

"What is the best way of stopping robbing?"

Mr. Eastman—I contract the entrance to one bee-space, and smoke the colony that is doing the robbing.

A. Graves—Would anger with a feather those that refuse to guard the hive.

Chas. Penton—I find the colonies that are doing the robbing and gash their frames with honey.

"How can we best preserve our surplus combs?"

S. S. Sleeper—Store them in a dry place, putting them about one inch apart, and fumigate them frequently with sulphur.

"Which are the best bees, the Italians or blacks?"

S. S. Sleeper—For gathering honey, the Italians, by all odds.

Elmer O'Dell—The Italians are far superior when running for extracted honey. For comb builders, I prefer hybrids.

"Why does some honey candy while others do not?"

Elmer O'Dell—Difference in the honey. Springville was chosen as the place for the next meeting.

After a vote of thanks to Rev. Vaught, and to the people for the use of the church, and to Prof. Knott for his fine music, the meeting adjourned.

Ellicott, N. Y.

Advice to Beginners.

A. N. DRAPER.

After reading the article under the above heading, on page 283, by Mr. Heddon, I thought that perhaps a few facts and quotations would not be uninteresting to beginners.

First. On page 682, AMERICAN BEE JOURNAL, Oct. 26, 1889, second column, I find the following under Mr. Heddon's name "in regard to the number of openings needed in a honey-board." He believed that one row would be sufficient for a strong colony, etc. If this be true, what about the much-lauded break-joint honey-board?

On page 642 of *Gleanings*, Sept. 1, 1890, first column near the top, I find the following: "In connection he uses a wooden thumb-screw to reduce propolis

accumulation. Mr. Tunicliff was very enthusiastic over this arrangement. He declared it the best frame extant. As to the thumb-screw, he owed Mr. Heddon nothing for it, for he had borrowed it from Mr. Manum, who had used it for many years before Mr. Heddon. He did not consider Mr. H. the first one to use closed-end frames in a tight-fitting box, for he had used them both in combination ever since 1878.

On page 45, "Success in Bee-Culture," near the bottom, I find the following: "For the past two seasons I have produced both in nearly equal quantities, and have now decided to make comb-honey my main crop hereafter. 'But,' I hear some one say, 'more bees will go to the fields when the combs are extracted, and no comb-builders are needed at home; hence, we must get more honey when the extractor is used.' Doubtless this is true, but it is equally a fact that I can keep a greater number of colonies without over-stocking my field when devoted to comb-honey storing, and without a corresponding increase of labor in caring for them [nonsense]; hence I will keep more bees, and raise higher-priced honey."

Then, Mr. Heddon describes his new hives. Extra-fine, four-piece dovetailed section, and his methods for producing large quantities of extra-fine white comb-honey, etc.

Later, when comb-honey was selling everywhere for from 12½ to 15 cents per pound, he was claiming in the bee-periodicals that he was selling his readily to the farmers at 20 cents per pound, on account of his honey being so nicely put up. It is in the BEE JOURNAL somewhere, but I cannot refer to the page.

On page 694 of the BEE JOURNAL for 1889, I see his crop of honey from 200 colonies was 1,000 pounds of comb, and 4,000 pounds of extracted, but I have seen no statement as to the price at which this was sold, though on the last page of his circular (1891) I find the following: "During the past year I have sold, almost exclusively to bee-keepers, etc., the choicest extracted-honey. I sold it at the low price of 8 cents per pound for basswood and white clover, and 7 cents per pound for bright amber, and 6 cents per pound for darker amber; all grades in 58 pound cans, net. The same goods were sold in barrels of 500 pounds net, at one cent per pound less than the above figures, all delivered free on board cars here; no charge for packages."

Lower down he says: "I expect the above prices will hold for the coming season," etc.

This would place the price of his clover honey at 7 cents per pound in barrels, and the dark honey at 5 cents.

This is good advice to give, especially as the demand for extracted-honey has been good, at from 7 to 10 cents per pound. My entire crop netted about 8½ cents, though I sold three barrels at 6 cents, to close it out.

On page 324 of *Gleanings* for May, 1890, I find the following from Mr. Barnett Taylor: "In mentioning my hive at the Wisconsin Bee-Keepers' Convention at Madison, you say it has a rabbeted top similar to my simplicity hive, to keep out wind and rain. I want to explain that the rabbet in my hive is not made to keep out wind and rain, but to always keep just a bee-space between the frames of two or more hives, when tiered up on top of each other. I now have a hive of the first lot of 50 that I ever made. I made them in 1865.....The only change I ever made in my hive was in making the frames deeper, and in this respect I have tried various depths; but of whatever depth, I used them in pairs."

On page 118, of *Gleanings*, 1891, I find the following advertisement:

"JUST OUT! Something entirely new in hives." An application for his circular discloses the fact that his "something entirely new" is simply a frame without a bottom-bar. If you will take the trouble to look at an old *Bee-Keepers' Text-Book* or *Bee-Keepers' Journal*, published by H. A. King, at Nevada, Ohio, over twenty years ago, you will find the same thing in the old American hive, of which thousands were made and sold all over the country.

Mr. Heddon will please excuse me, but the following quotation seems so appropriate in this place. You will find it on page 683, *AMERICAN BEE JOURNAL*, Oct. 26, 1889, first column near the top: "I tell you, friends, the man who steals bread, goaded to the act by the sight of palid lips of starving wife or child, has an excuse; but he who steals the honor that belongs to another, steals something that he cannot successfully use, and something that fits him only as the armor of a plumed knight fits a pollywog, and is a thief by nature."

Let me call your attention to still another passage, on the same page and number of the *AMERICAN BEE JOURNAL*, second column: "Mr. Heddon warned bee-keepers against this seed business... You know that I publish a local paper

out at Dowagiac. Well, I procured a cut of alsike clover. Then I wrote an article on alsike as a desirable crop for farmers to raise. I spread it on pretty thick, but I guess I did not stretch the truth any. But not a word did I say about the honey-producing qualities. Then, I went to our seedsman and showed him what I had done, and induced him to put in a stock of seed. I then gave notice of where the seed could be obtained. The result is, that the farmers have sowed largely of the alsike. [Now notice.] When a man has no paper to work with, and cannot work with some other paper, the next best plan is to get some farmer interested, and let him do the talking."

I have never seen an article anywhere that showed up the writer so well as this last quotation. If I understand this aright, it means this: Mr. Heddon has a paper of his own, with which to advance his personal interests. But would advise bee-keepers not provided with a paper to induce some poor honest editor, or gull some farmer, to help him influence his neighbors. If it does not mean this, what does it mean?

My idea is, that we ought to investigate Mr. Heddon's method of selling honey, etc. Why should he be allowed to gull beginners, if the quotations I have made are true?

Upper Atton, Ills.

Plant Lice on Fruit Trees.

I should like to inquire regarding a green louse that is infesting the under side of the leaf, and the stems of this year's growth on my plum trees, and some on the pear and apple trees. I have not seen any on the old trees. What are they, and is there any remedy?

Rochester, Mich. H. L. LINTZ.

[The insects referred to are plant lice. They are very common this year, and have done much damage. They first work on the leaves, then go to the stems of the fruit. When they are so numerous—millions upon millions—they are likely to seriously injure, if they do not destroy, the trees and fruit. Their insect enemies are now eating them, and will doubtless lessen the mischief.]

The remedy is kerosene emulsion, but it should be applied early in the season, just before the leaves form.—A. J. Cook.]

CONVENTION DIRECTORY.

Time and place of meeting.

1891.
July 30.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Pineville, N. C.
Aug. 6.—Rock River, at Sterling, Ills.
J. M. Burich, Sec., Morrison, Ills.
Sept. 3.—Susquehanna County, at So. Montrose, Pa.
H. M. Seeley, Sec., Harford, Pa.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—P. H. Elwood....Starkville, N. Y.
SECRETARY—C. P. Dadant.....Hamilton, Ills.

National Bee-Keepers' Union.

PRESIDENT—James Heddon..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Bee and Honey Gossip.

Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Good Yield from Raspberries.

Bees have done well here this Spring, although there has been a prolonged drouth, no rain having fallen for nine weeks, but within the last 48 hours we have had several showers of rain—just in time to save the basswood. White clover dried up, but I have taken 90 pounds of raspberry honey per colony from several colonies, and the prospects are good for a large yield from basswood, as the trees are full of buds, which will open in a few days.

J. K. RICH.

Cato, Ills., July 4, 1891.

Is it from Purple Asters?

This is not a first-class locality for honey, although white clover is good, and there is plenty of it. Black locust is plentiful here, and the blossoms are full of nectar. It blooms just before clover, and lasts about a week, but I have never known a year when the bees were able to work on it more than a day or two, on account of bad weather. Last

year they worked about a day and a half on it, when a cold rain began, the blossoms were frozen, and the bees were compelled to remain in the hives. Even with uniting and feeding, I have never been able to get a hive booming full of bees by locust bloom. I produce extracted-honey, and my experience is that the bees will not go into the sections and build combs, unless there is a good honey-flow, and then they will store honey in surplus comb, if the flow is only a little more than they require. I have had Italians for fifteen years, but it is hard to keep them pure. After the honey-flow from clover is over, I take the purest queen (she is generally the best), and put her in the worst mixed hybrid colony, and give all the other dark ones capped queen-cells from this queen. By doing this every year, the bees cannot get very black. Up to three years ago I had to feed my bees every Fall, as there was no Fall pasturage, but for three years it has been getting better every year, and last Fall the brood-chambers were so full in some of the hives that I had to take some of the full frames out, and replace them with half-filled frames from other hives. I can only account for this Fall honey-flow by the fact that a swampy place about two miles from my apiary has become filled with purple asters. The honey is very dark, with a red tinge, and granulates very badly.

Lancaster, Pa. THOS. THURLOW.

Hive Covers.

If nothing else could be found that would keep the water out of bee-hives, I would use cast-iron covers, made just the same as covers or weights are made for snap flasks, except that there should not be any hole in the top, and make them a little lighter, with a flange of 1 inch on each end. Thus, you have a hive cover that will last 2,000 years, and never leak, check, nor warp out of shape, and it will not be necessary to put stones on the hives to prevent their blowing over. Cast-iron is cheap, and very durable if well painted.

Osakis, Minn. MARK D. JUDKINS.

Excellent Crop Prospects.

Bees are swarming too much, but basswood will be in bloom in a few days, and the prospects are good for an excellent crop of honey.

H. H. ROSEBROCK.

Owatonna, Minn., July 6, 1891.

No Good White Clover Honey.

Complaint is being made by most beekeepers of the dark honey stored by bees during the past month, but this is at an end now, as a few days of cool weather has checked honey-dew completely. The honey-dew this season is very dark, of rank flavor, and quite useless. Owing to the early prospect of white clover being plentiful, great preparations were made for section honey; but, alas! those white sections are filled with honey-dew. A good article of white clover honey will be hard to find in this locality.

JNO. NEBEL & SON.

High Hill, Mo., July 3, 1891.

Self-Hivers.

I have tried Alley's self-hiver on two occasions, and it would not work. The queen went up into the top box all right, but neither she nor the drones would go down into the lower box. Mr. Alley says he will guarantee the self-hivers to hive 99 swarms out of 100, but I do not believe they will hive a dozen swarms out of 100. My bees are doing well now, and are booming on the alsike and white clovers; basswood will be in bloom in a few days, and there is a large area sown to buckwheat in my vicinity, so the bees will have good pasturage until frost comes. Bees in this part of the State wintered well, but some colonies Spring dwindled after they were taken from the cellar.

D. B. CASSADY.

Litchfield, Minn., July 4, 1891.

Honey from Heart's-Ease.

Last year my honey crop was 4,000 pounds from 60 colonies, Spring count. I put 79 colonies into Winter quarters last December, and took out 78 colonies in good condition this Spring, two of which I sold, leaving me 76 colonies, and at this date, June 30, I have 113 colonies. They have built 500 new combs, but where will they get the honey to fill them? The bees did well on fruit-bloom; then white clover began to bloom about May 1, and for a few days honey was quite plentiful, but the heavy rains commenced, the bloom increased, and the honey decreased. There was plenty of white clover, but only nectar enough to keep up swarming. I have not taken a pound of comb-honey, and very little extracted. Basswood began blooming on June 27, but it

is two miles from my apiary, and only the strongest bees can fly to it. I saw an account in one of the bee-periodicals of some one having bees that would work from 15 to 30 miles away from home, and if I had such bees it would be no trouble to secure tons of honey. But there are doubts in my mind about bees flying 15 miles from home in search of nectar, or even 4 miles. Within one-half mile to two miles of my apiary, on the east, are hundreds of acres of white clover, while on the west, about two miles distant, is a grove of basswood. When the honey-flow is good from the clover, there are ten bees at work on clover to one on the basswood. The nectar being easier to obtain from the basswood than from clover, this great difference is accounted for by the distance, my observation being that from one-half to two miles is the best range of flight for bees to do good work. The prospect is good for a Fall flow of nectar from heart's-ease, if we have plenty of rain in July and August. We have had a great deal of wet weather this month.

J. R. ESKEW.

Shenandoah, Iowa, June 30, 1891.

Cold Weather in Minnesota.

The weather has been very unfavorable for bees during the past two weeks—wet, cloudy and cold, with considerable wind. There was a heavy rain yesterday and last night, and this morning the mercury stands at 46°. Basswood is in bloom, but unless the weather moderates soon, the bees will gather very little honey from it. The weather is too cold for comb-building, and the bees are leaving the sections, and going down into the brood-chambers.

C. THEILMANN.

Theilmanton, Minn., July 8, 1891.

Bloom Devoid of Nectar.

This is one of the poorest years for honey that I ever knew. It promised everything, and has fulfilled nothing. I have 250 colonies in my apiaries, and, after six weeks of abundant bloom, I have no more surplus than I fed to the bees in the Spring. The season began unusually early, and now seems drawing to a close. On pleasant days the bees have been busy all the time, but they seemed to gather no more nectar than was necessary for their own use. This is the general complaint in this locality.

B. H. STANDISH.

Evansville, Wis., July 6, 1891.

Not Much Surplus.

The weather this month has been poor for the bees. Basswood bloom is just opening on the low lands. There will not be much surplus from white clover.

P. H. ELWOOD.

Herkimer, N. Y., July 8, 1891.

Useless Honey-Dew.

My crop of early honey is entirely ruined by honey-dew. I have thousands of sections of the stuff, and do not know what to do with it. It will not do to sell, as it would certainly spoil the market, even for good honey; and it will not do for Winter stores. The only way I can devise to make any use of it at all, is to extract it, and keep it for Spring feeding. I am afraid that some bee-keepers will put this stuff on the market, as it is generally capped white, and thus disgust people with all honey, and again give the old Wiley lie a great boom.

C. H. DIBBERN.

Milan, Ills., July 8, 1891.

Put No Honey-Dew on the Market.

I fear the bug-juice honey, that is so plentiful this season, will ruin the market for good honey, if bee-keepers cannot be persuaded not to offer it for sale. One man told me that he had large quantities of it, and that he was selling it at 5 cents per pound. Perhaps you can, through the BEE JOURNAL, discourage the sale of the stuff, so that, if we get a flow of good honey in the Fall, there will be a market for the genuine article.

G. W. COLE.

Canton, Ills.

[Yes, indeed. Let no one presume to offer such stuff for sale as honey. His reputation is at stake! The pursuit is also in danger of being sadly injured if that is done.—Ed.]

Poor Prospects.

Bees began working on alsike and white clovers about June 10, and have stored a few pounds in the sections up to date, but there has been too much rain and cold, northwest winds. Basswood has been in bloom for a week, but the bees have been confined to their hives much of the time, and unless it clears up within a few days, the crop will be slim.

WM. PEARSON.

Oswalt, Iowa, July 2, 1891.

Wavelets of News.

Bee and Honey Statistics.

In Greece there are 30,000 colonies, producing 3,000,000 pounds of honey; in Denmark 90,000, producing 2,000,000 pounds; in Russia 110,000, producing the same; in Belgium 200,000, producing 5,000,000 pounds; in Holland 240,000, producing 6,000,000 pounds; in France 950,000, producing 23,000,000 pounds; in Germany 1,450,000, and in Austria 1,550,000, each producing 40,000,000 pounds of honey.

Careful estimates put the number of bee-keepers in the United States at 350,000; over 10,000 of this number keep more than 500 colonies each. The value of the honey produced by them in 1889 was over \$100,000,000, and the value of the beeswax produced for the same year exceeded \$17,000,000.

Prevention of Swarming.

The great study of the bee-keeper is how to keep the bees from swarming. A colony sending out a swarm in the season of honey-flow, means almost entire cessation of honey-gathering in the hive for some days; and possibly no more will be stored in the sections that season. But by proper management of the swarm that goes out, one may get considerable comb-honey.

One way is to hive the swarm in frames, having only a strip of comb-foundation about one inch wide in each, which insures straight combs if the hive is level. Then place a case of sections above, and when they are about half filled, raise them and put another under, and so keep them storing honey before they have much brood to feed.—*Exch.*

Bees Cause a Panic.

KANSAS CITY, Mo., June 22.—An immense swarm of bees caused a little panic to-day at the corner of Eighth and Main streets, the very heart of the business portion of the city. A wandering minstrel from Italy stopped on the corner and proceeded to grind out a choice air. The bees, which were just passing the spot, were attracted by the hum of the organ, and attempted to cluster on the Italian's head. The musician beat a hasty retreat unharmed.

The queen-bee then headed for the globe of an electric light, and her en-

raged subjects following, settled within and about the globe, seemingly contented in their resting place.

Then the electric-light man, making his rounds to renew the carbons, lowered the globe to the street, not noticing its strange occupants. That made the bees mad, and the crowd that had collected to see the fun, soon decided there was very little humor in the situation. The bees scattered about among the crowd, which hastily dispersed, several having been severely stung. A farmer finally came with a box and succeeded in hiving the bees and carrying them off.—*Ex.*

Shade for Bee-Hives.

I want shade over my bees, because I want it shady when I work at them.

If you have no trees over your hives you can put on a shade-board wider than the hive, and projecting on the south side. Have an inch or two of space between the shade-board and the hive.

Set your hives near the ground, say, on stands from 2 to 4 inches high. Some use four bricks—two on the back on edge, and two in front laid flat. It is well to have the back end an inch or two higher than the front. It helps the bees to clean house.

Do not allow the grass to bother the bees in front of the hive. Keep it cut short, or, better still, do not let it grow at all. Salt will kill it, or a pile of sand will do it.

Level your hives with a spirit level, from side to side.

I do not think it makes much difference which way the hive faces. Most of mine face east. The arrangement I like best is to have two close together facing east, and two standing against these, back to back, facing west—four in a clump. If you want them convenient for watching for swarms, there is no better way than to have them in a straight row; providing you have enough to make a row.—C. C. MILLER, in *Stockman and Farm*.

District Fair.

The twelfth Annual Fair of the Wayne, Henry and Randolph Counties Agricultural Association will be held at Dalton, Ind., Sept. 8 to 11, 1891. In the Apian Department \$11 in money are offered and a year's subscription to the AMERICAN BEE JOURNAL. Joe Replogle is Superintendent.

How Bees Know Each Other.

In "Combe's System of Phrenology," page 281, the following sentence occurs: "All the animals which belong to a herd, and also all the bees in a hive, from 20,000 to 80,000 in number, know each other."

The statement in regard to bees is undoubtedly true; but when it is used to prove that bees have the organ of "Form," and recognize their fellows by its exercise, the author only proved that he knew less about bees than about phrenology.

The fact is, that bees do not drive an intruder away or kill him, because they know him to be such by his size, form or color, but because his scent (hive odor) is different from their own.

This is soon found out if we attempt to unite 2 colonies of bees without the proper preliminary manipulations known to all intelligent apiarists, for a slaughter at once begins.

A peaceful and harmonious union, however, is easily accomplished if the bee-keeper first proceeds to "unite" their odor by spraying both colonies alike with peppermint water, or in some other way of his own. Bees thus prepared never fight when united.—T. GERSHAM, in the *Phrenological Journal*.

Bees Deserting Hives.

There are some cranks in the bee family as well as in the human, but as a general thing they appreciate good treatment. Bees should not be asked to help to clean out a dirty, dusty old hive and fill it with nice, clean combs. I would not do it if I were them; I would hunt up a nice, clean place in a hollow tree in the woods.

Is it not reasonable to suppose that a bee returning from the fields heavily laden, and compelled to walk a dusty, dirty floor, would get soiled? And when they unloaded get into their honey and bread.

Give swarms nice, sweet smelling hives and there will be less heard about absconding. In the days of the old gum it was fashionable to wash them out with cool water from the well and apple leaves. No doubt the bees appreciate it.

Some persons have a mistaken idea with reference to hiving a swarm. When the bees are in, they leave it until night before moving it where it is to remain. The hive may be all right, but if it stands in the sun when the scouts return, they may tell them of a cooler home, and conduct them to it.

The safest way to do when they are hived near the cluster, is to move them away where they are to remain. If the hive is not set in a shady place, it should be shaded in some way.

When a swarm has been hived and removed from the spot where they clustered, many times the scouts will be seen for hours, and even days, flying around the branch where they clustered, and telling them how mean they were to run away while they were out hunting for a home.—MRS. L. HARRISON, in the *Prairie Farmer*.

Uses of Bees.

Bees are valuable not only for their products, but because they also act as agents in the fertilization of plants. One reason why they are profitable is because they gather and store up that which would be entirely lost without their aid. They work in places that are rarely seen, and the fence corners and neglected spots are often their most valuable pastures.—*Exchange*.

Prompt Work.

I have received the sections, and I am very well pleased with them, and the promptness in which you sent them. I like the BEE JOURNAL much better since you changed the size of it to the present form. I learn something new every week from perusing the BEE JOURNAL.

Tippecanoe City, O. J. H. ROHRER.

The Cold Weather has caused the so-called honey-dew to cease, and that is a blessing.

The Honey-Bee: Its Natural History, Anatomy, and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, illustrated with 72 figures and 136 illustrations. \$1.00. For sale at this office.

When Writing a letter be sure to sign it. Too often we get letters with the name of the post-office, but no County or State. One such came recently, and we looked into the Postal Guide and found there were places by that name in 13 States. That order for goods will have to wait until another letter comes to give the proper address. Be sure to stamp your letter, or it may go to the dead letter office.



ADVERTISING RATES.

20 cents per line of Space, each insertion.

No Advertisement inserted for less than \$1.00.

A line of this type will admit about eight words.
ONE INCH will contain TWELVE lines.

Editorial Notices, 50 cents per line.
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Advertisements intended for next week must reach this office by Saturday of this week.

ALFRED H. NEWMAN,

BUSINESS MANAGER.

Special Notices.

Subscribers who do not receive their papers promptly, should notify us at once.

Send us one new subscription, with \$1.00, and we will present you with a nice Pocket Dictionary.

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to pay for another year.

Systematic work in the Apiary will pay. Use the Apiary Register. It costs:

For 50 colonies (120 pages) \$1 00
" 100 colonies (220 pages) 1 25
" 200 colonies (420 pages) 1 50

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

Price of both. Club.

The American Bee Journal.....	\$1 00....	
and Gleanings in Bee-Culture.....	2 00....	1 75
Bee-Keepers' Guide.....	1 50....	1 40
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Canadian Bee Journal.....	1 75....	1 65
American Bee-Keeper.....	1 50....	1 40
The 7 above-named papers.....	6 00....	5 00
and Langstroth Revised (Dadant).....	3 00....	2 75
Cook's Manual (1887 edition).....	2 25....	2 00
Quinby's New Bee-Keeping.....	2 50....	2 25
Doolittle on Queen-Rearing.....	2 00....	1 75
Bees and Honey (Newman).....	2 00....	1 75
Blinder for Am. Bee Journal.....	1 60....	1 50
Dzierzon's Bee-Book (cloth).....	3 00....	2 00
Root's A B C of Bee-Culture.....	2 25....	2 10
Farmer's Account Book.....	4 00....	2 20
Western World Guide.....	1 50....	1 30
Heddon's book, "Success,".....	1 50....	1 40
A Year Among the Bees.....	1 50....	1 35
Convention Hand-Book.....	1 50....	1 30
Weekly Inter-Ocean.....	2 00....	1 75
Toronto Globe (weekly).....	2 00....	1 70
History of National Society.....	1 50....	1 25
American Poultry Journal.....	2 25....	1 50
The Lever (Temperance).....	2 00....	1 75
Orange Judd Farmer.....	2 00....	1 75
Farm, Field and Stockman.....	2 00....	1 75
Prairie Farmer.....	2 00....	1 75
Illustrated Home Journal.....	1 50....	1 35
American Garden.....	2 50....	2 00
Rural New Yorker.....	2 50....	2 00
Nebraska Bee-Keeper.....	1 50....	1 35

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

The Convention Hand-Book

is very convenient at Bee-Conventions. It contains a simple Manual of Parliamentary Law and Rules of Order for Local Bee-Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with Subjects for Discussion. In addition to this, there are about 50 blank pages, to make notes upon, or to write out questions, as they may come to mind. They are nicely bound in cloth, and are of the right size for the pocket. We will present a copy for one new subscription to the *BEE JOURNAL* (with \$1.00 to pay for the same), or 2 subscribers to the *HOME JOURNAL* may be sent instead of one for the *BEE JOURNAL*.

Clubs of 5 New Subscriptions for \$4.00 to any addresses. Ten for \$7.50.

If you have a desire to know how to have Queens fertilized in upper stories, while the old Queen is still laying below—how you may *safely introduce* any Queen, at any time of the year when bees can fly—all about the different races of bees—all about shipping Queens, queen-cages, candy for queen-cages, etc.—all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know, send for "Doolittle's Scientific Queen-Rearing;" a book of 170 pages, which is nicely bound in cloth, and is as interesting as a story. Price, \$1.00. For sale at this office.

Supply Dealers should write to us for wholesale terms and cut for Hastings' Perfection Feeders.

Red Labels are quite attractive for Pails which hold from 1 to 10 lbs. of honey. Price, \$1.00 per hundred, with name and address printed. Sample free.

A Nice Pocket Dictionary will be given as a premium for only **one new** subscriber to this JOURNAL, with \$1.00. It is a splendid little Dictionary—just right for the pocket. Price, **25 cents**.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you.

Binders made especially for the BEE JOURNAL for 1891 are now ready for delivery, at 50 cents each, including postage. Be sure to use a Binder to keep your numbers of 1890 for reference. Binders for 1890 only cost 60 cents, and it will pay you to use them, if you do not get the volumes otherwise bound.


When talking about Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we will present you with a copy of the Convention Hand-Book, by mail, postpaid. It sells at 50 cents.

It is a Prize in Itself.—I have just seen the ILLUSTRATED HOME JOURNAL for June, with the Rebus and offer of prizes for its solution. As the paper, at 50 cents a year, is a prize in itself for the amount, I take pleasure in enclosing it, and if my answer to the Rebus is correct, you can place me as a contestant for the prize.

H. E. LAING.

Chicago, Ills.

The Bee-Keepers' Directory, by Henry Alley, Wenham, Mass. It contains his method for rearing queens in full colonies, while a fertile queen has possession of the combs. Price by mail, 50 cents.

 The Union or Family Scale has been received, and I am much pleased with it.

W. H. KIMBALL.

Davenport, Iowa.

We send both the Home Journal and Bee Journal for one year, for \$1.35.

Very Well Pleased.—The Sewing Machine and Scales are received in good order, and I am well pleased with them. They do good work. The sewing machine is ornamental as well as useful. The scales are very handy for family use.—G. RUFF, Burlington, Iowa.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted-honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25c.

Calvert's No. 1 Phenol, mentioned in Cheshire's Pamphlet on pages 16 and 17, as a cure for foul-brood, can be procured at this office at 25 cents per ounce, by express.

HONEY AND BEESWAX MARKET.

NEW YORK, July 10.—Demand good for extracted-honey, with sufficient supply. No comb-honey in market. We quote: Extracted—common, 70c per gal.; good to choice, 75@78c.; orange bloom, 7@7½c per lb. Beeswax: Demand good; supply limited, at 28@30c.

HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, July 11.—Demand fair for new 1-lb. comb, at 15@16c. Extracted, 6@6½c. Beeswax, in good demand and light supply at 25c.

CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 11.—Trade good in extracted-honey, with plenty of the new crop in market. New comb-honey is plentiful. We quote: Choice comb, 14@15c. Extracted, 5@8c. Beeswax is in good supply and demand at 25@28c for good to choice yellow.

C. F. MUTH & SON, Freeman & Central Aves.
CHICAGO, July 11.—Demand for comb and extracted honey not very active. We quote: Comb, 15@17c; extracted, 7@8c. Beeswax in good demand at 27c.

S. T. FISH & CO., 189 S. Water St.

KANSAS CITY, July 10.—Demand for honey light, with new crop coming in. We quote: Comb—1-lb. white, 16@18c; dark, 14c; 2-lb. white, 15c; dark, 12c. Extracted—white, 7@8c; dark, 5@5½c. Beeswax, 25@27c.

HAMBLIN & BEARSS, 514 Walnut St.

CHICAGO, July 11.—Demand light, and the new honey offered not very white; a fancy article of new comb-honey will sell at 17c. We quote: Comb, 15@17c. Extracted, 6@8c, as to color and quality. Beeswax: Demand equal to supply, at 28.

R. A. BURNETT, 161 S. Water St.

BOSTON, July 10.—Demand poor, supply light. We quote: Comb, 12@18c; extracted, 7½@9c. Beeswax: None in market.

BLAKE & RIPLEY, 57 Chatham St.

ALBANY, N.Y., July 10.—Demand for honey very light. Attractive new comb-honey would sell at 15@18c. Beeswax, in light supply and wanted at 30c.

H. R. WRIGHT, 326-328 Broadway.

NEW YORK, July 10.—Demand for honey, quiet, and shipments increasing. We quote: New crop, comb, 14@15c. Extracted—Florida, 7@7½c. Southern, 75@80c per gallon. Beeswax: Demand, light; supply, increasing; good stock, 29@30c.

F. G. STROHMAYER & CO., 122 Water St.

MILWAUKEE, July 11.—Demand for honey fair; supply moderate. Old-crop honey out of the way, and market in good order for shipments of new. We quote: Comb, 1-lb., 16@18c. Extracted, white, 7½@8c. Beeswax, in fair supply and dull, at 25@28c.

A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, July 6.—Demand for honey good, and supply light. Crop late and lighter than last season. We quote: Comb, 1-lb., 12@14c; no 2-lb. in market. Extracted, 5@6c. Beeswax in light demand, and market almost bare, at 25@27c.

SCHACHT, LEMCKE & STEINER, 16 Drum St.

CHICAGO, July 11.—Honey market quiet, and shipments increasing. A fancy white comb, in clean package, will find ready sale at a high figure. We quote: Comb, 15@17c. Extracted, 6@8c. Beeswax scarce and in good demand at 27@31c.

J. A. LAMON, 44-46 S. Water St.

DETROIT, July 11.—Demand for comb-honey is slow and supply light. We quote: Comb, 14@15c; extracted, 8@9c. Beeswax in fair demand, at 27@28c.

M. H. HUNT, Bell Branch, Mich.

Lots of Replies.

During the year 1888, we had an advertisement running in the American Bee Journal, and we had the same in several Daily and Weekly papers, but to our surprise we received more than double the number of responses from the advertisement in the American Bee Journal, than from all our others combined.

The fact that we are still receiving letters referring to our advertisement in the Bee Journal, shows that it is preserved and read long after it is received. Newspapers are read and thrown aside and that ends it, but the Bee Journal is preserved, and the advertisements are often noticed and bring responses long after they appeared in it.

We regard the American Bee Journal as a first-class advertising medium.

Cedar Rapids High-Speed Engine Co.,
HENRY RICKEL, President.

You Need an Apiary Register, and should keep it posted up, so as to be able to know all about any colony of bees in your yard at a moment's notice. It devotes two pages to every colony. You can get one large enough for 50 colonies for a dollar, bound in full leather and postage paid. Send for one before you forget it, and put it to a good use. Let it contain all that you will want to know about your bees—including a cash account. We will send you one large enough for 100 colonies for \$1.25; or for 200 colonies for \$1.50. *Order one now.*

Open the hives only when it is necessary, and when it is warm enough for the bees to fly.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

FOR SALE.—Thirty colonies Hybrid Bees, in 10-frame Langstroth Hives; all straight combs, built on foundation. Price, \$4.00 per colony. Can be shipped at once. JESSE FAIRCHILD, 1241 Homan Ave., Chicago, Ills. 3A1f